

1     Claims:

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3     1     Apparatus for use in handling a load comprising  
4     a load-bearing rope, a mechanism for paying out and  
5     recovering the load-bearing rope, a service cable  
6     and a service cable holder for holding the service  
7     cable, a first wrapping device for rotating one of  
8     the service cable and the load-bearing rope around  
9     the other as they are payed out to wrap the two  
10    together, and to unwrap them from one another as  
11    they are recovered, a mechanism for holding and  
12    paying out a securing member, and a second wrapping  
13    device for wrapping the securing member around the  
14    service cable and the load-bearing rope, and to  
15    unwrap the securing member from the service cable  
16    and load-bearing rope as either of them is  
17    recovered.

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19    2     Apparatus as claimed in claim 1, wherein the  
20    securing member is in the form of a planar strip,  
21    tape or ribbon.

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23    3     Apparatus as claimed in any preceding claim,  
24    wherein the securing member is resilient.

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26    4     Apparatus as claimed in any preceding claim,  
27    wherein the securing member is tensioned as it is  
28    applied to the rope.

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30    5     Apparatus as claimed in any preceding claim,  
31    wherein the first wrapping device rotates a service

1 cable drum in a circular path around the axis of the  
2 rope.

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4 6 Apparatus as claimed in any one of claims 1-4,  
5 wherein the service cable is stored on a drum having  
6 an axis that is co-axial with the axis of the rope  
7 and wherein the service cable wrapping device  
8 rotates around the drum to pay out the service  
9 cable.

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11 7 Apparatus as claimed in any preceding claim,  
12 wherein the securing member is stored on a securing  
13 member drum and wherein the second wrapping device  
14 rotates the securing member drum in a circular path  
15 around the axis of the rope.

16

17 8 Apparatus as claimed in one of claims 1-6,  
18 wherein the securing member is stored on a drum that  
19 has an axis which coincides with the axis of the  
20 load-bearing rope, the securing member drum having a  
21 central aperture through which the load-bearing rope  
22 passes, and wherein the securing member passes over  
23 a sheave which is mounted for movement in a circular  
24 path around the axis of the load-bearing rope.

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26 9 Apparatus as claimed in any preceding claim,  
27 wherein the second winding device is arranged to  
28 discharge the securing member radially outward of  
29 the service cable to wind the securing member around  
30 the service cable and the load-bearing rope.

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1     10     Apparatus as claimed in any preceding claim,  
2     wherein the securing member comprises an elastic  
3     strip with a non-elastic reinforcing member to limit  
4     the maximum extension of the securing member.

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6     11     Apparatus as claimed in any preceding claim,  
7     wherein the securing member incorporates an adhesive  
8     to hold the securing member to the rope and service  
9     cable.

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11     12     Apparatus as claimed in any preceding claim,  
12     wherein the wrapping devices are arranged to pay out  
13     the service cable and/or the securing member close  
14     to the axis of the rope.

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16     13     Apparatus as claimed in any preceding claim,  
17     having more than one service cable wrapping device  
18     to accommodate respective service cables and to wrap  
19     them on to the rope.

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21     14     Apparatus as claimed in any preceding claim,  
22     having guide means to guide the service cable(s),  
23     the securing member and/or the rope, the guide means  
24     comprising at least one roller or sheave.

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26     15     Apparatus as claimed in claim 14, wherein the  
27     guide means comprises a roller cage provided around  
28     the circumference of the securing member, the guide  
29     means and/or the rope.

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31     16     A method for use in handling a load,  
32     comprising:

1     paying out a load-bearing rope;  
2     paying out a service cable;  
3     wrapping one of the rope and the service cable  
4     around the other as they are being paid out;  
5     wrapping a securing member around the service cable  
6     and load-bearing rope as they are being paid out;  
7     and subsequently unwrapping the securing member and  
8     service cable from the load-bearing rope as the  
9     load-bearing rope is recovered.

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11     17     A method as claimed in claim 16, wherein the  
12     securing member is wound around the load-bearing  
13     rope in the opposite direction to the service cable.

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15     18     A method as claimed in claim 16 or claim 17,  
16     wherein the securing member is wrapped around the  
17     rope and service cable(s) only at intervals along  
18     the rope.

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20     19     A method as claimed in claim 16, wherein the  
21     securing member is wrapped continuously around the  
22     length of the rope as it is payed out.

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24     20     A method as claimed in any one of claims 16-19,  
25     wherein the securing member is tensioned as it is  
26     wound around the rope.

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28     21     A method as claimed in any one of claims 16-20,  
29     wherein tape is applied intermittently on top of the  
30     securing member.

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1     22     A method as claimed in any one of claims 16-21,  
2     wherein at least two service cables are entwined  
3     with the rope before the securing member is applied.  
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